

Add Ping Container Dummy

```
PS C:\Users\Asus\Desktop> docker run --rm -d --name dummy npsea2k21/ping:1.0
853dd536b562bed75d7ec3db9ee53b8b70abb25e263df0a15e40d46f9bece55a
PS C:\Users\Asus\Desktop> docker network inspect bridge
[
  {
    "Name": "bridge",
    "Id": "61d9fe94bd2eb2bb491128fa3b1739202c00da92d8f5944d24a3307dee6201de",
    "Created": "2021-05-15T10:12:19.5040619Z",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": null,
      "Config": [
        {
          "Subnet": "172.17.0.0/16",
          "Gateway": "172.17.0.1"
        }
      ]
    },
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    },
    "ConfigOnly": false,
    "Containers": {
      "853dd536b562bed75d7ec3db9ee53b8b70abb25e263df0a15e40d46f9bece55a": {
        "Name": "dummy",
        "EndpointID": "bec5ee3837753b675ef7a97eea67544b416cf42cddb1f4fee52366847f6aeed5",
        "MacAddress": "02:42:ac:11:00:02",
        "IPv4Address": "172.17.0.2/16",
        "IPv6Address": ""
      }
    },
    "Options": {
      "com.docker.network.bridge.default_bridge": "true",
      "com.docker.network.bridge.enable_icc": "true",
      "com.docker.network.bridge.enable_ip_masquerade": "true",
      "com.docker.network.bridge.host_binding_ipv4": "0.0.0.0",
      "com.docker.network.bridge.name": "docker0",
      "com.docker.network.driver.mtu": "1500"
    },
    "Labels": {}
  }
]
```

Adding Another Ping Container And Setting It to Ping Previous

```

PS C:\Users\Asus\Desktop> docker run --rm -d -e PING_TARGET=172.17.0.2 --name pinger npsea2k21/ping:1.0
b99ff55216f99eb8d40643b347a6f5b9c5d0aedfc582452f0d834898a551c7f4
PS C:\Users\Asus\Desktop> docker ps

```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
b99ff55216f9	npsea2k21/ping:1.0	"sh -c 'ping \$PING_T..."	44 seconds ago	Up 40 seconds		pinger
853dd536b562	npsea2k21/ping:1.0	"sh -c 'ping \$PING_T..."	4 minutes ago	Up 4 minutes		dummy

```

PS C:\Users\Asus\Desktop> docker logs pinger
PING 172.17.0.2 (172.17.0.2) 56(84) bytes of data.
64 bytes from 172.17.0.2: icmp_seq=1 ttl=64 time=0.078 ms
64 bytes from 172.17.0.2: icmp_seq=2 ttl=64 time=0.047 ms
64 bytes from 172.17.0.2: icmp_seq=3 ttl=64 time=0.041 ms
64 bytes from 172.17.0.2: icmp_seq=4 ttl=64 time=0.120 ms
64 bytes from 172.17.0.2: icmp_seq=5 ttl=64 time=0.047 ms
64 bytes from 172.17.0.2: icmp_seq=6 ttl=64 time=0.048 ms
64 bytes from 172.17.0.2: icmp_seq=7 ttl=64 time=0.047 ms
64 bytes from 172.17.0.2: icmp_seq=8 ttl=64 time=0.039 ms
64 bytes from 172.17.0.2: icmp_seq=9 ttl=64 time=0.041 ms
64 bytes from 172.17.0.2: icmp_seq=10 ttl=64 time=0.045 ms
64 bytes from 172.17.0.2: icmp_seq=11 ttl=64 time=0.054 ms
64 bytes from 172.17.0.2: icmp_seq=12 ttl=64 time=0.031 ms
64 bytes from 172.17.0.2: icmp_seq=13 ttl=64 time=0.047 ms
64 bytes from 172.17.0.2: icmp_seq=14 ttl=64 time=0.054 ms
64 bytes from 172.17.0.2: icmp_seq=15 ttl=64 time=0.049 ms
64 bytes from 172.17.0.2: icmp_seq=16 ttl=64 time=0.053 ms
64 bytes from 172.17.0.2: icmp_seq=17 ttl=64 time=0.077 ms
64 bytes from 172.17.0.2: icmp_seq=18 ttl=64 time=0.105 ms
64 bytes from 172.17.0.2: icmp_seq=19 ttl=64 time=0.075 ms
64 bytes from 172.17.0.2: icmp_seq=20 ttl=64 time=0.069 ms
64 bytes from 172.17.0.2: icmp_seq=21 ttl=64 time=0.160 ms
64 bytes from 172.17.0.2: icmp_seq=22 ttl=64 time=0.066 ms
64 bytes from 172.17.0.2: icmp_seq=23 ttl=64 time=0.057 ms
64 bytes from 172.17.0.2: icmp_seq=24 ttl=64 time=0.049 ms
64 bytes from 172.17.0.2: icmp_seq=25 ttl=64 time=0.054 ms
64 bytes from 172.17.0.2: icmp_seq=26 ttl=64 time=0.064 ms
64 bytes from 172.17.0.2: icmp_seq=27 ttl=64 time=0.046 ms
64 bytes from 172.17.0.2: icmp_seq=28 ttl=64 time=0.087 ms
64 bytes from 172.17.0.2: icmp_seq=29 ttl=64 time=0.044 ms
64 bytes from 172.17.0.2: icmp_seq=30 ttl=64 time=0.045 ms
64 bytes from 172.17.0.2: icmp_seq=31 ttl=64 time=0.153 ms
64 bytes from 172.17.0.2: icmp_seq=32 ttl=64 time=0.046 ms
64 bytes from 172.17.0.2: icmp_seq=33 ttl=64 time=0.054 ms
64 bytes from 172.17.0.2: icmp_seq=34 ttl=64 time=0.079 ms
64 bytes from 172.17.0.2: icmp_seq=35 ttl=64 time=0.120 ms
64 bytes from 172.17.0.2: icmp_seq=36 ttl=64 time=0.051 ms

```

Adding a Custom Network

```

PS C:\Users\Asus\Desktop> docker network create skynet
b7ac839e511d9fafaec3d8317da3d4201668da7b79fb379378fe5ec51b0f8538
PS C:\Users\Asus\Desktop> docker network ls
NETWORK ID        NAME      DRIVER  SCOPE
61d9fe94bd2e     bridge   bridge  local
864f70ab7607     host     host    local
89a81ec0b3c1     none     null    local
b7ac839e511d     skynet   bridge  local
PS C:\Users\Asus\Desktop> docker network inspect skynet
[
  {
    "Name": "skynet",
    "Id": "b7ac839e511d9fafaec3d8317da3d4201668da7b79fb379378fe5ec51b0f8538",
    "Created": "2021-05-15T10:54:18.0415641Z",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": {},
      "Config": [
        {
          "Subnet": "172.18.0.0/16",
          "Gateway": "172.18.0.1"
        }
      ]
    },
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    },
    "ConfigOnly": false,
    "Containers": {},
    "Options": {},
    "Labels": {}
  }
]

```

Adding Containers to a Network

```

PS C:\Users\Asus\Desktop> docker network create skynet
6717043c73db070fa712b6731041910a342c175f6756106487ced1a08c2c61e4
PS C:\Users\Asus\Desktop> docker network inspect skynet
[
  {
    "Name": "skynet",
    "Id": "6717043c73db070fa712b6731041910a342c175f6756106487ced1a08c2c61e4",
    "Created": "2021-05-21T06:41:05.3182397Z",
    "Scope": "local",
    "Driver": "bridge",
    "EnableIPv6": false,
    "IPAM": {
      "Driver": "default",
      "Options": {},
      "Config": [
        {
          "Subnet": "172.18.0.0/16",
          "Gateway": "172.18.0.1"
        }
      ]
    },
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    },
    "ConfigOnly": false,
    "Containers": {},
    "Options": {},
    "Labels": {}
  }
]
PS C:\Users\Asus\Desktop> docker run --rm -d --network skynet --name dummy npsea2k21/ping:1.0
59d6ea7c8323b5b6d56074eabb4d7d8e8f89c5b3040524975aa7fd35a6c9f93b

```

```

PS C:\Users\Asus\Desktop> docker run --rm -d --network skynet -e PING_TARGET=dummy --name pinger2 npsea2k21/ping:1.0
6a3764fbca78c4c0c58786c0cd2137aeddad50e834609d5cedb43bb7746ff757
PS C:\Users\Asus\Desktop> docker logs pinger2
PING dummy (172.18.0.2) 56(84) bytes of data.
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=1 ttl=64 time=0.461 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=2 ttl=64 time=0.089 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=3 ttl=64 time=0.081 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=4 ttl=64 time=0.068 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=5 ttl=64 time=0.072 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=6 ttl=64 time=0.084 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=7 ttl=64 time=0.087 ms
64 bytes from dummy.skynet (172.18.0.2): icmp_seq=8 ttl=64 time=0.118 ms
PS C:\Users\Asus\Desktop>

```